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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/571,883	03/13/2006	Reinhold Klipper	CH8413/LeA 36,760	4607	
7	590 11/15/2006		EXAM	INER	
Jennifer R Seng			BERNSHTEYN, MICHAEL		
Patent Departm	nent	•			
LANXESS CORPORATION			ART UNIT	PAPER NUMBER	
111 RIDC West Park Drive			1713	1713	
Pittsburgh, PA 15275-1112			DATE MAILED: 11/15/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	
		10/571,883	KLIPPER ET AL.	
	Office Action Summary	Examiner	Art Unit	
		Michael Bernshteyn	1713	
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the o	orrespondence address	
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLEMENTED IN CHEVER IS LONGER, FROM THE MAILING Ensions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing apparent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tire I will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. mely filed the mailing date of this communication (D) (35 U.S.C. § 133).	
Status				
1) <u>□</u> 2a) <u>□</u> 3) <u>□</u>	Responsive to communication(s) filed on This action is FINAL . 2b) This since this application is in condition for allowed closed in accordance with the practice under	 s action is non-final. ance except for formal matters, pro		5
Dispositi	on of Claims			
5) ☐ 6) ☑ 7) ☑ 8) ☐ Applicati 9) ☐ 10) ☐	Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) 1-7 is/are rejected. Claim(s) 3 and 4 is/are objected to. Claim(s) are subject to restriction and/of the specification is objected to by the Examination The drawing(s) filed on is/are: a) accompany accompany and request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examination of the control of the control of the control of the oath or declaration is objected to by the Examination of the control of the control of the control of the oath or declaration is objected to by the Examination of the control of the control of the oath or declaration is objected to by the Examination of the control	er. cepted or b) objected to by the drawing(s) be held in abeyance. Section is required if the drawing(s) is objected to by the	e 37 CFR 1.85(a). njected to. See 37 CFR 1.121(d).
Priority u	ınder 35 U.S.C. § 119			
12)⊠ a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Bureasee the attached detailed Office action for a list	nts have been received. Its have been received in Applicationity documents have been received in the control of the control o	ion No ed in this National Stage	
2) Notic 3) Inforr	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate	

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 2 recites the limitation "obtainable" in the line 2.

This rationale is applicable to polymer "obtainable" by a stated process because any variation in any parameter within the scope of the claimed process would change the polymer produced. One who made or used a polymer made by a process other than the process cited in the claim would have to produce a polymer using all possible parameters within the scope of the claim, and then extensively analyze each product to determine if this polymer was obtainable by a process within the scope of the claimed process. See *Ex parte Tanksley*, 26 USPQ 2d 1389. Appropriate correction is required.

2. Claims 3, 5 and 7 provide for the use of ion exchangers and the apparatus, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 3, 5 and 7 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App.

1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Objections

3. Claims 3 and 4 are objected to because of the following informalities: the use of the phrase "preferably" to link a broad range of values with a narrow range of values renders the claims awkward and not in the compliance with the current US practice. It is not clear which range controls the actual metes and bounds of the claimed subject matter. It is suggested to put preferable range in the dependent claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Karlou-Eyrisch et al. (U. S. Patent Application Publication 2002/0106659).

Karlou-Eyrisch discloses crosslinked bead polymers doped with superparamagnetic iron oxide and a process for the preparation of the bead polymers (abstract).

With regard to the limitations of claims 1 and 2, Karlou-Eyrisch discloses a process for preparing crosslinked **bead polymers**, which is characterized in that a

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monomer mixture of hydrophilic (meth)acrylate, amino (meth)acrylate, crosslinker and, where appropriate, other monomer is polymerized to beads by inverse suspension polymerization, and the latter are then doped with superparamagnetic **iron oxide** by an after-treatment with iron salt solution (page 2, [0024]).

Karlou-Eyrisch discloses that the sample is mixed with the bead polymer according to the invention at a pH of 7 or below, preferably in the range from 2 to 6, particularly preferably in the range from 2 to 3, at room temperature. The bead polymer is removed with the aid of a magnetic field. The complex of nucleic acid and bead polymer obtained in this way can then be purified by washing with suitable buffers (page 3, [0046]). To liberate the bound nucleic acids from the complex, the pH of the complex is then adjusted to pH values above 7, preferably from 8 to 14, particularly preferably in the range 12 to 14 (page 3, [0047]).

The iron salts taken up by the swollen bead polymer are converted into the corresponding iron hydroxides by adding bases. Alkaline solutions of sodium hydroxide, sodium carbonate or ammonia are very suitable. Ammonia is preferred because excess can easily be removed by evaporation. Ammonium salts formed are removed by thorough washing with water (page 3, [0037]).

Therefore, all the limitations of claims 1 and 2 are expressly met by Karlou-Eyrisch.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosoda et al. (JP 09-225298).

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With regard to the limitations of claims 1-7, Hosoda discloses a **cation exchange resin** and/or chelate resin comprising iron oxide and a method of removing **arsenic**from the solutions with the help of the above-mentioned resin (abstract).

Hosoda discloses alkali treatment of cation exchange resin and the chelating resin using sodium hydroxide and potassium hydroxide as desirable compounds for adjusting **pH to 4-10** and less than 13, which is within the claimed range (page 3, [0016], [0018], [0020]).

Hosoda discloses glass column containing apparatus, which include cation exchange resin and/or chelate resin with 20-48 meshes of grain size for absorbing of arsenic (page 3, [0022], page 5, [0031]). It was clearly shown, that it is not necessary to use a lot of flocculants like the conventional coagulating sedimentation, and arsenic can be collected effectively (page 6, [0035]).

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claims 1-7 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-7 of copending Application No. 11/299,098. This is a

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provisional double patenting rejection since the conflicting claims have not in fact been

patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Bernshteyn whose telephone number is 571-

272-2411. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Bernshteyn Patent Examiner AU 1713

MB 11/09/2006

LING-SUI CHOI PRIMARY EXAMINER

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